

First record of *Phyllolabis savtshenkoi* (Diptera, Limoniidae) in Morocco

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Received 3 February 2021 | Accepted 26 April 2021 | Published 30 June 2021

Citation: Taybi AF, Mabrouki Y, Keresztes L (2021) First record of *Phyllolabis savtshenkoi* (Diptera, Limoniidae) in Morocco. Travaux du Muséum National d'Histoire Naturelle “Grigore Antipa” 64(1): 115–118. <https://doi.org/10.3897/travaux.64.e63917>

Abstract

In this paper, we provide the first record of *Phyllolabis savtshenkoi* in Morocco previously known only from Spain and the Canary Islands. In addition, *Dicranomyia goritiensis* and *Geranomyia caloptera* are recorded for the first time in the oriental region of Morocco.

Keywords

Short-palped crane flies, new records, contribution, West Mediterranean.

Introduction

Limoniidae is one of the most diverse and cosmopolitan dipteran family, it has nearly 1513 species in the Westpalaearctic (Oosterbroek 2021). This family is found in almost all types of habitat but it shows a markedly higher diversity in humid environments (Tachet et al. 2010). The larvae are aquatic or semiaquatic and colonise habitats that go from deposit areas to vegetal detritus in the shores of rivers and

lentic environments, and also hygropetric surfaces. Their trophic spectrum includes shredders, detritivorous and grazers of the periphyton, also including predator species (Oscorz et al. 2011).

The Limoniidae fauna has been little studied in Morocco; it was only recently that attracted the attention of taxonomists, we now recognize 67 species to occur in the country (Driauach and Belqat 2016). Recent field surveys conducted on the oriental region of Morocco have led to the discovery of a new record for the country and two for the region represented here.

Material and methods

Sampling. Field surveys were conducted from 2014 to 2020, in which several localities were collected along the Oriental Region of Morocco (Fig. 1). The Limoniidae flies were caught in the field by sweeping riparian vegetation with entomological hand nets. Samples were identified to species level when possible, placed in labelled tubes with 70% or 96% ethanol.

Male genitalia were examined after being cleared in 10% KOH. Layer photos of *Phyllolabis savtshenkoi* were taken using an Olympus SZ61 stereomicroscope equipped with a Canon 650D camera. Photos were combined using the Zerene Stacker software. All specimens used in the present study were collected by the authors and

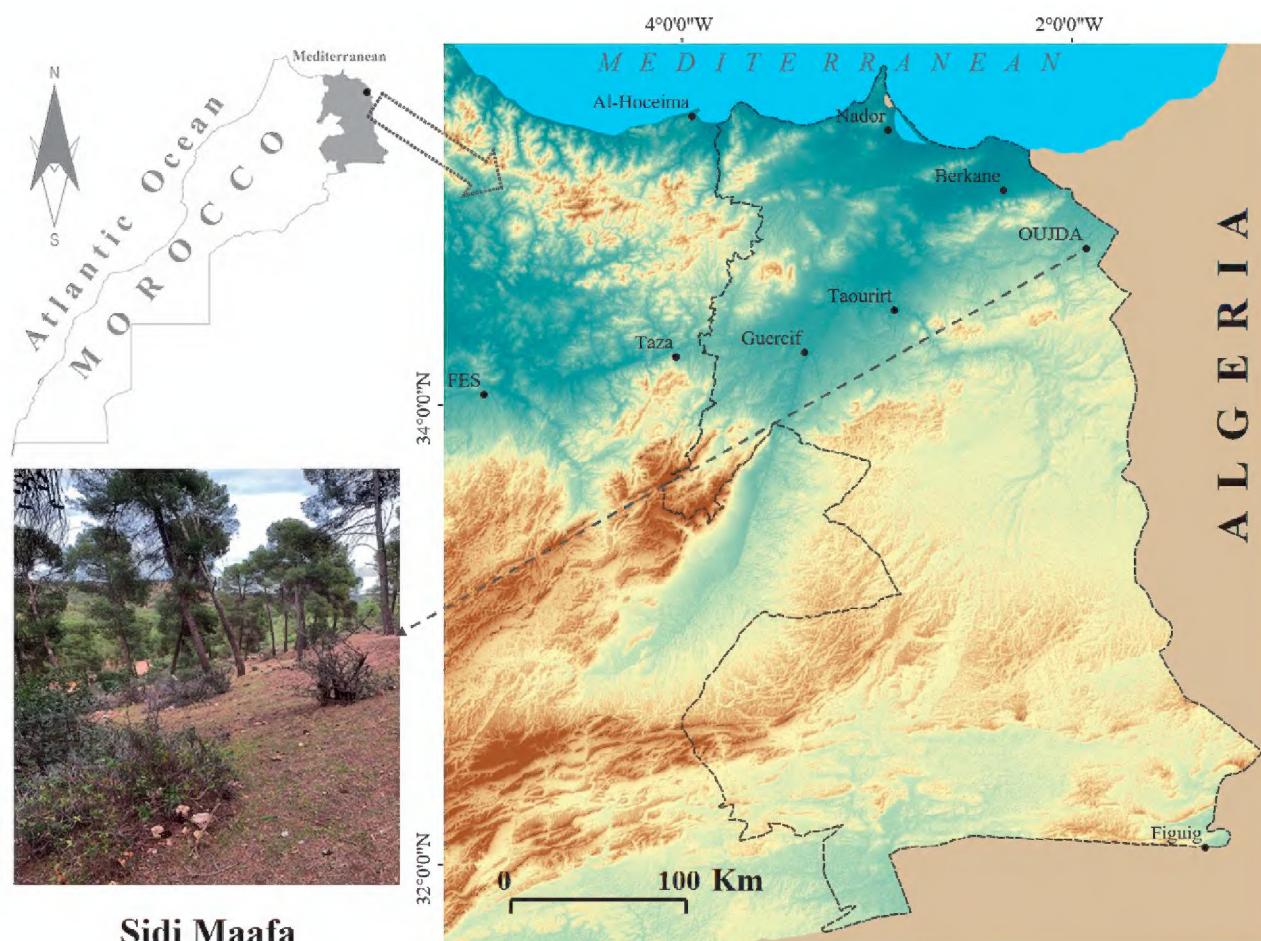


Figure 1. Location of the Oriental region in Morocco and type habitat of Sidi Maafa Park.

deposited in the Diptera Collection of the Faculty of Biology and Geology, University Babes-Bolyai, Cluj Napoca, Romania (DCFBG).

Results

Subfamily Limnophilinae

Phyllolabis savtshenkoi Theowald, 1981

Material examined. Sidi Mâafa (Oujda), 3♂♂, 13♂♂, 26.II.2017, 34°38'12.1"N 1°53'34.4"W.

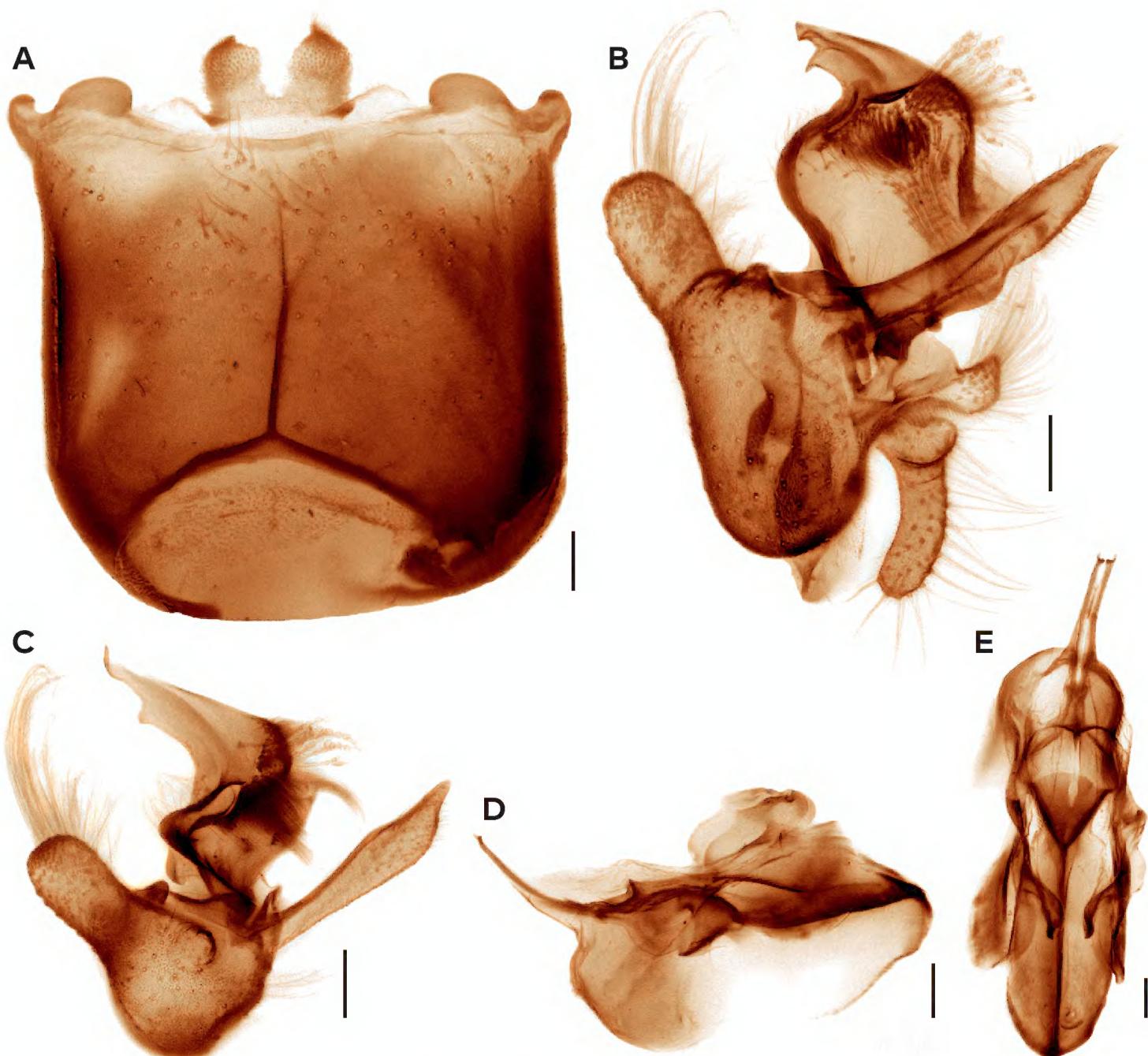


Figure 2. Male terminalia of *Phyllolabis savtshenkoi*, details: **A** 9th tergit, dorsal; **B** gonopodit, lateral; **C** gonopodit lateral, detail; **D** aedeagal complex, lateral; **E** aedeagal complex dorsal. Scale bar 0.1 mm.

Distribution. Previously known from Spain and the Canary Islands only, we record it for the first time in Morocco and North Africa (Eiroa and Carles-Tolrá 2019). During the study period, both sexes of this species were found at Sidi Mâafa park at Oujda, future prospections may increase its known distribution range. Male terminalia is presented in Fig. 2.

Subfamily Limoniinae

Dicranomyia (Dicranomyia) goritiensis (Mik, 1864)

Material examined. Debdou, 1♂, 27.IV.2016, 33°57'32.6"N 3°02'26.9"W.

Distribution. Europe, Algeria, Georgia, Turkey, Israel (Oosterbroek 2021). In Morocco it was known from High Atlas and the Rif (Driauach and Belqat 2016), we record it for the first time in the Oriental region of the country.

Geranomyia caloptera Mik, 1867

Material examined. Guercif, 1♂, 9.VII.2020, 33°57'33 N 3°30'52.8 W.

Distribution. Known to occur in a few European countries. In the Mediterranean area recorded from France, Italy, Turkey and Israel (Oosterbroek 2021). In Morocco it was known only from the High Atlas (Driauach et al. 2013), we record it for the first time in the Oriental region of the country.

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